

DWR Climate News Digest

January 2019

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The information provided in the DWR Climate News Digest is a selected compilation of recent popular news articles, publications, and other information relevant to climate change and water management, and is intended to provide educational and thought-provoking material for water managers and water users.

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TOPICS

Reports

[Draft California 2030 Natural and Working Lands Climate Change Implementation Plan](#)

[California Air Resources Board – January 3, 2019]

“This Plan aims to integrate management objectives wherever possible, coordinating all natural and working lands programs under a united approach that will move us toward the State’s combined goal of maintaining a resilient carbon sink and improved air and water quality, water quantity, wildlife habitat, recreation, and other benefits.”

[Statewide Summary Report: California’s Fourth Climate Change Assessment](#)

[OPR – January 16, 2019]

“This report presents findings in the context of existing climate science, including strategies to adapt to climate impacts and key research gaps needed to spur additional progress on safeguarding California from climate change.”

General Water Management

[The West’s Great River Hits Its Limits: Will the Colorado Run Dry?](#)

[Yale Environment 360 – January 14, 2019]

“As the Southwest faces rapid growth and unrelenting drought, the Colorado River is in crisis, with too many demands on its diminishing flow. Now those who depend on the river must confront the hard reality that their supply of Colorado water may be cut off.”

[Climate Change Could Turn Earth's Aquifers into a Time Bomb](#)

[Popular Mechanics – January 22, 2019]

“A new scientific study shows that if climate change wreaks havoc on the Earth's groundwater, it would present an environmental “time bomb” with global consequences.”

Sea-Level Rise and other Ocean Impacts

[California's Coastal Habitats Face Existential Threat from Rising Seas](#)

[The Guardian – December 31, 2018]

"Climate change is transforming the state's coast but with habitats hemmed in by cliffs, condos and farms, pre-emptive action is needed to preserve biodiversity."

[Ice loss from Antarctica has sextupled since the 1970s, new research finds](#)

[Washington Post – January 14, 2019]

"Antarctic glaciers have been melting at an accelerating pace over the past four decades thanks to an influx of warm ocean water — a startling new finding that researchers say could mean sea levels are poised to rise more quickly than predicted in coming decades."

Extreme Weather Events

[Most Americans say weather disasters shifted their views on climate change](#)

[PBS News Hour – January 22, 2019]

"74 percent of Americans say extreme weather in the past five years — hurricanes, droughts, floods and heat waves — has influenced their opinions about climate change."

[Extreme Weather Events Could Worsen Climate Change](#)

[Scientific American – January 24, 2019]

"Droughts, heat waves and other extreme climate-related events are growing concerns in a warming world. Studies have found climate change is already fueling an increase in some extreme events and that they're likely to worsen as temperatures continue to climb."

Human Health Impacts

[Climate change is making us sicker and shortening our lives, doctors say](#)

[Los Angeles Times – January 23, 2019]

"A new study outlines the myriad ways climate change is already worsening human health and causing premature deaths."

[Food Shocks Are Causing Hunger to Spike](#)

[Scientific American – January 29, 2019]

"The world's food supply is on a dangerous path, according to a sweeping new study published in Nature Sustainability. The international team of researchers outlines three bad things happening simultaneously: Food shocks are coming more frequently, thanks in part to climate change, armed conflict and mismanagement."

Wildlife and Ecosystem Impacts

[Before they disappear: Treasured UNESCO sites at risk from climate change](#)

[CNN – January 7, 2019]

“From the sinking city of Venice to the mass bleaching of Australia's Great Barrier Reef, climate change is drastically impacting some of the world's most treasured heritage sites.”

[How much can forests fight climate change?](#)

[Nature – January 15, 2019]

“Trees are supposed to slow global warming, but growing evidence suggests they might not always be climate saviours.”

Greenhouse Gas Mitigation

[PG&E's bankruptcy could slow California's fight against climate change](#)

[Los Angeles Times – January 15, 2019]

“In a grim twist, the bankruptcy of PG&E Corp. could now slow California's efforts to fight climate change.”

[Cities Are Tucking Climate Change Fixes into New Laws](#)

[WIRED – January 15, 2019]

“In most of these cases, the arguments in favor of the policies have been about economics and justice. But oh, hey, cool: They also save the planet.”

Climate Change Modeling

[Are We Living Through Climate Change's Worst-Case Scenario?](#)

[The Atlantic – January 15, 2019]

“Many economists expect carbon emissions to drop somewhat throughout the next few decades. But maybe they won't. If 2018 is any indication, meekly positive energy trends will not handily reduce emissions, even in developed economies like the United States. It raises a bleak question: Are we currently on the worst-case scenario for climate change?”

[Century-old logs of whaling ships might improve data for climate-change research](#)

[Washington Post – January 26, 2019]

“Old Weather, a citizen-science project, is helping improve climate-change models using data from old ships' logs.”

Climate Change Adaptation

[Once derided, ways of adapting to climate change are gaining steam](#)

[National Geographic – January 9, 2019]

“Recognition is spreading that communities need to build resilience to climatic and coastal threats even as the world seeks ways to curb emissions driving global warming.”

[Climate Change's Giant Impact on the Economy: 4 Key Issues](#)

[New York Times – January 17, 2019]

"Many of the big economic questions in coming decades will come down to just how extreme the weather will be, and how to value the future versus the present."

Additional Items of Interest

[U.S. Carbon Pollution Surged in 2018, After Years of Stasis](#)

[The Atlantic – January 8, 2019]

"It's an ominous sign for America's ability to meet its goals under the Paris Agreement on climate change."

[Most Coffee Species At Risk Of Extinction Due To Climate Change](#)

[Forbes – January 17, 2019]

"As many of us wake to our much needed morning coffee, a recent study finds that over half of all wild coffee species worldwide are in danger of going extinct."

[Pentagon Warns Bases Imperiled by Climate Change in Dire Report](#)

[Fortune – January 18, 2019]

"The U.S. Defense Department has issued a dire report on how climate change could affect the nation's armed forces and security, warning that rising seas could inundate coastal bases and drought-fueled wildfires could endanger inland ones."

[2018 was the fourth warmest year on record -- and more evidence of a 'new normal,' scientist group reports](#)

[Washington Post – January 24, 2019]

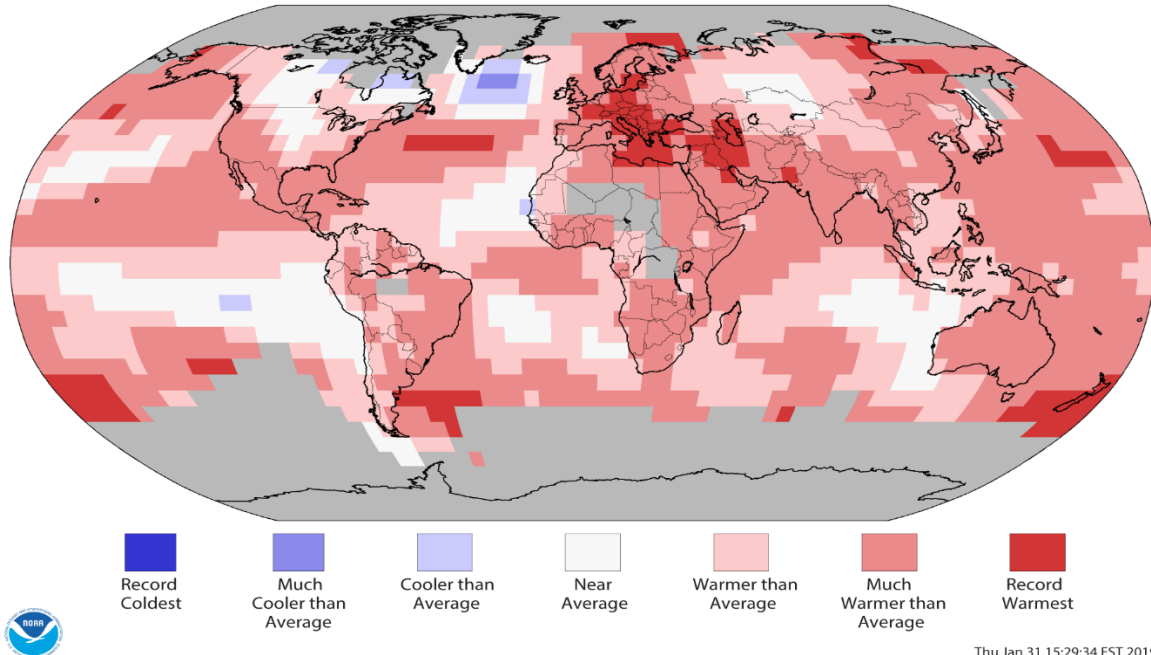
"The year 2018 is likely to have been the fourth warmest year on record and joins three other extra-hot years since 2015 that suggest a leap upward in warmth that the Earth may never return from in our lifetimes."

Image to Ponder

Land & Ocean Temperature Percentiles Jan–Dec 2018

NOAA's National Centers for Environmental Information

Data Source: GHCN–M version 3.3.0 & ERSST version 4.0.0



The average global temperature during 2018 was 1.42 degrees F above the 20th-century average. Image source: NOAA

Earth's long-term warming trend continued in 2018 as persistent warmth across large swaths of land and ocean resulted in the globe's fourth hottest year in NOAA's 139-year climate record. The year ranks just behind 2016 (warmest), 2015 (second warmest) and 2017 (third warmest).

[More from the NOAA report here](#)

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